

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/03613

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C12N15/12, C07K14/78, A61K38/39, A61P9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C12N15/00-15/90

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
GENBANK/DBBJ/GENESEQ, PIR/SWISSPROT, BIOSIS/MEDLINE/WPIDS (STN),
JSTPLUS (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	INOUE S. et al., Identification of a novel gene involved in the pathogenesis of cardiac hypertrophy in rats. Circulation Journal, 31 March, 2002 (31.03.02), 66(Supplement 1), page 765	1-7
X	WO 01/74901 A2 (STANTON Lawrence W),	1-3
A	11 October, 2001 (11.10.01), & US 2002/110804 A	4-7
A	JOSHUA E.L.G. et al., Nitric oxide mediated induction of cytochrome c oxidase mRNA and protein in a mouse macrophage cell line. Neuroscience Letters, 200, 288, pages 107 to 110	1-7

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
24 April, 2003 (24.04.03)Date of mailing of the international search report
13 May, 2003 (13.05.03)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GEORGE I.G. et al., NO increases permeability of cultured human cervical epithelia by cGMP-mediated increase in G-actin. Am.J.Physiol.Cell.Physiol., 2000, 278, pages C942 to C952	1-7
A	KATAOKA C. et al., Important role of Rho-kinase in the pathogenesis of cardiovascular inflammation and remodeling induced by long-term blockade of nitric oxide synthesis in rats. Hypertension, 2002 February, 39(2), p.245-50	1-7
A	TAKAORI K. et al., Inhibition of nitric oxide synthase causes cardiac phenotypic modulation in rat. Eur.J.Pharmacol., 12 March, 1997 (12.03.97), 322(1), pages 59 to 62	1-7

A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl¹ C12N15/12, C07K14/78, A61K38/39, A61P9/00

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl¹ C12N15/00-15/90

最小限資料以外の資料で調査を行った分野に含まれるもの

国際調査で使用了電子データベース (データベースの名称、調査に使用した用語)

GENBANK/EMBL/DBJ/GENESEQ

PIR/SWISSPROT

BIOSIS/MEDLINE/WPIDS (STN), JSTPLUS (JOIS)

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	INOUE S et al., Identification of a novel gene involved in the pathogenesis of cardiac hypertrophy in rats. Circulation Journal, 2002. 03. 31, 66 (Supplement 1), p. 765	1-7
X A	WO 01/74901 A2 (STANTON Lawrence W) 2001. 10. 11 &US 2002/110804 A	1-3 4-7

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」 特に関連のある文献ではなく、一般的技術水準を示すもの

「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの

「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)

「O」 口頭による開示、使用、展示等に言及する文献

「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの

「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの

「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの

「&」 同一パテントファミリー文献

国際調査を完了した日

24. 04. 03

国際調査報告の発送日

13.05.03

国際調査機関の名称及びあて先

日本国特許庁 (ISA/J P)

郵便番号100-8915

東京都千代田区般が関三丁目4番3号

特許庁審査官 (権限のある職員)

伏見 邦彦

(印)

4 B 9838

電話番号 03-3581-1101 内線 3448

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	JOSHUA E L G et al., Nitric oxide mediated induction of cytochrome c oxidase mRNA and protein in a mouse macrophage cell line. Neuroscience Letters, 2000, 288, p. 107-110	1-7
A	GEORGE I G et al., NO increases permeability of cultured human cervical epithelia by cGMP-mediated increase in G-actin. Am J Physiol Cell Physiol, 2000, 278, p. C942-C952	1-7
A	KATAOKA C et al., Important role of Rho-kinase in the pathogenesis of cardiovascular inflammation and remodeling induced by long-term blockade of nitric oxide synthesis in rats. Hypertension, 2002 Feb, 39(2), p. 245-50	1-7
A	TAKAORI K et al., Inhibition of nitric oxide synthase causes cardiac phenotypic modulation in rat. Eur J Pharmacol, 1997 Mar 12, 322(1), p. 59-62	1-7